

UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

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L	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	AT	TORNEY DOCKET NO.
	08/690	,033 37/	SIKES KODK	· G	<u> </u>
Г	コ		EXAMINER MALIROWSKI, C		
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	ROCKWELL INTERNATIONAL CORPORATION INTELLECTUAL PROPERTY DEPT M/S 124 323 ACC COLLINS ROAD NE CEDAR RAPIDS IA 52498			ART UNIT	PAPER NUMBER 23
				DATE MAILED 2515	
					09/27/96

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Notice of Allowability

Application No. **08/690,033**

Applicant(s)

Koch et al.

Examiner

Walter Malinowski

Group Art Unit 2515



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course. ☐ This communication is responsive to preliminary amendments C and D received July 31 1996 X The allowed claim(s) is/are 1, 3-9, 11-15, and 23-38 X The drawings filed on Sep 30, 1994 are acceptable. Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). □ All □ Some* □ None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received: Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED. ☐ Applicant MUST submit NEW FORMAL DRAWINGS because the originally filed drawings were declared by applicant to be informal. including chapges required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. including changes required by the proposed drawing correction filed on _____, which has been approved by the examiner. including changes required by the attached Examiner's Amendment/Comment. Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal lettter addressed to the Official Draftsperson. ☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included. Attachment(s) Notice of References Cited, PTO-892 ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). Notice of Draftsperson's Patent Drawing Review, PTO-948 ■ Notice of Informal Patent Application, PTO-152 X Interview Summary, PTO-413 WILLIAM L. SIKES X Examiner's Amendment/Comment SUPERVISORY PATENT EXAMINER Examiner's Comment Regarding Requirement for Deposit of Biological Material **GROUP 2500** X Examiner's Statement of Reasons for Allowance

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gregory Williams on September 25 1996.

2. The application has been amended as follows:

The Table of Contents page, page i, has been deleted.

In claim 13, on line 9, "□" has been replaced by --]--.

In claim 23, on lines 14-15, "12,", "33,", "34,", "37,", and "38," have been deleted.

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REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

As to claims 1, 23/1, and 24/23/1, no prior art of record teaches or suggests a compensator for a liquid crystal display in which the compensator comprises al layer of birefringent material which comprises a polymer matrix including polymerized nematic material and unpolymerized nematic material and in which the tilt angle of the compensator varies along an axis normal to the layer of birefringent material and is limited to values between approximately 25 degrees and approximately 65 degrees.

Upon reconsideration, as to claims 3-9, 11, 12, 14, 15, 23/(3-7, 9, 11, 12, 14, 15, 25-28, 30-32, 35, 36), 24/23/(3-7, 9, 11, 12, 14, 15, 25-28, 30-32, 35, 36), 25-28, 30-38, no prior art of record teaches or suggests a compensator for a liquid crystal display in which the azimuthal angle varies along an axis normal to the layer and the tilt angle is fixed between approximately 25 degrees and approximately 65 degrees along an axis normal to the layer nor a compensator in which the tilt angle varies along an axis normal to the layer of birefringent material.

As to claims 29, 23/29, and 24/23/29, no prior art of record teaches or suggests a compensator for a liquid crystal display in which the tilt angle and the azimuthal angle vary along along an axis normal to the layer and wherein the optical symmetry axis of adjacent layers vary azimuthally in a positive sense and a negative sense respectively.

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As to claims 13, 23/13, and 24/23/13, no prior art of record teaches or suggests a compensator for a liquid crystal display wherein the optical symmetry axis of each layer has a respective tilt angle which varies along an axis normal to the layer with the tilt angles of the adjacent layers varying in a positive sense and a negative sense respectively and wherein the optical symmetry axis of each layer has a respective azimuthal angle which varies along an axis normal to the layer with the azimuthal angles of adjacent layers varying in a positive sense and a negative sense respectively.

Kizaki et al., U.S. Patent No. 5,126,868, teach a compensator with a varying azimuthal angle (col. 9, lines 9-24) and a pretilt angle of between 10 degrees and 30 degrees. However, Kizaki et al. do not teach that the optical symmetry axes of adjacent layers vary azimuthally in a positive sense and a negative sense respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's 4. disclosure.

Kozaki et al., U.S. Patent No. 5,124,824, teach a liquid crystal compensator 2.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter J. Malinowski whose telephone number is (703) 305-6531.

The art unit fax number is (703) 308-7726.

wjm

September 26, 1996

Hilliam L. Seles

GROUP 2500